



# SOUTH HILLS JUNCTION

STATION AREA ANALYSIS

MAY 10, 2021



Port Authority



# INTRODUCTION

## SOUTH HILLS JUNCTION



### Housekeeping

- Interpreter instruction
  - If ASL interpretation is needed:
    1. Make sure you are in gallery view. (Select Gallery View from upper right corner).
    1. Click the interpreter's video and select the "more" button (three dots). Select "Pin Video."
- Mute yourself
- Submit questions through the chat function

**\*This meeting is being recorded and will be uploaded to the project website.**



# INTRODUCTION

## SOUTH HILLS JUNCTION



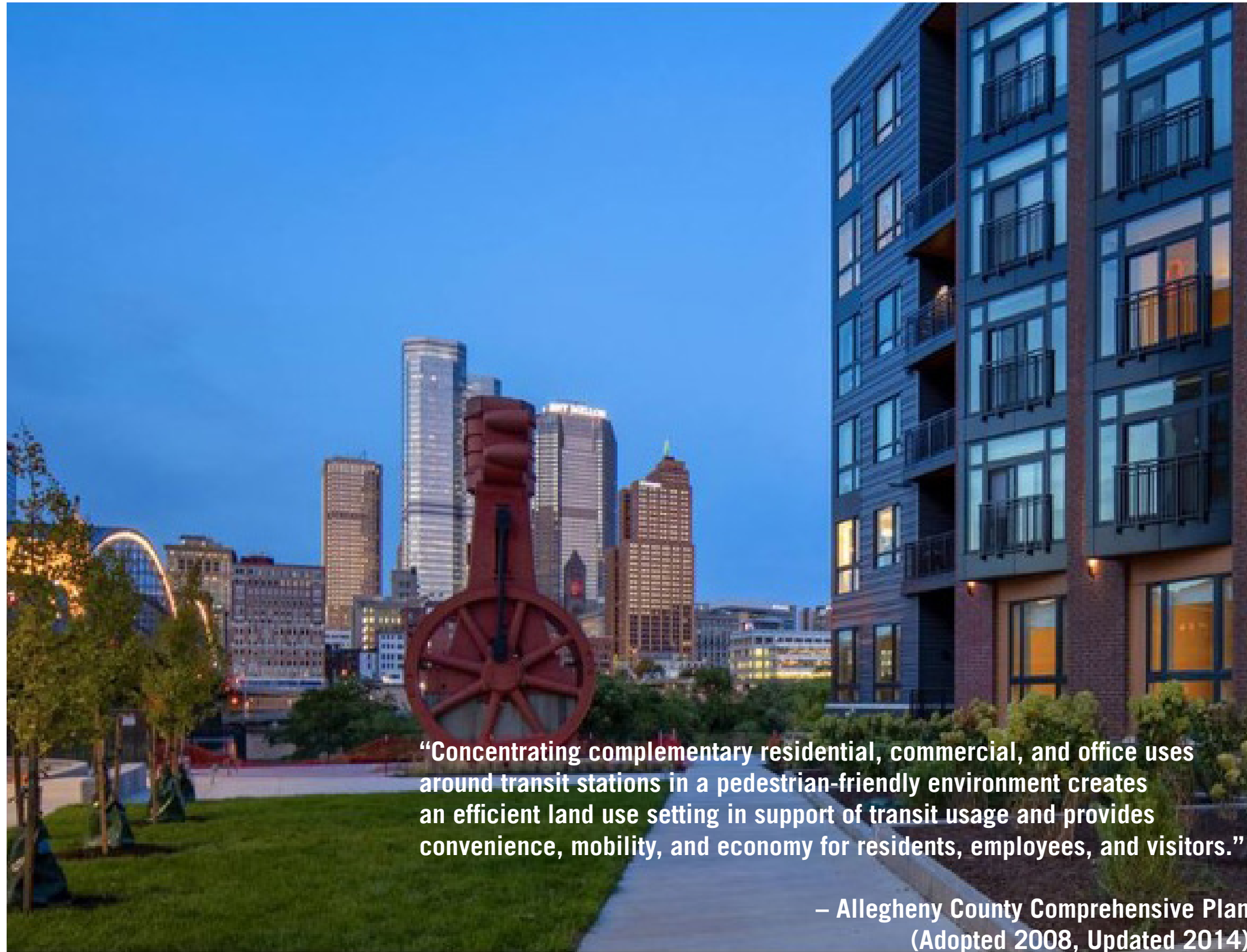
### Agenda

1. Welcome
2. Presentation
3. Social Pinpoint Overview
4. Breakout Sessions
5. Reconvene and Conclude



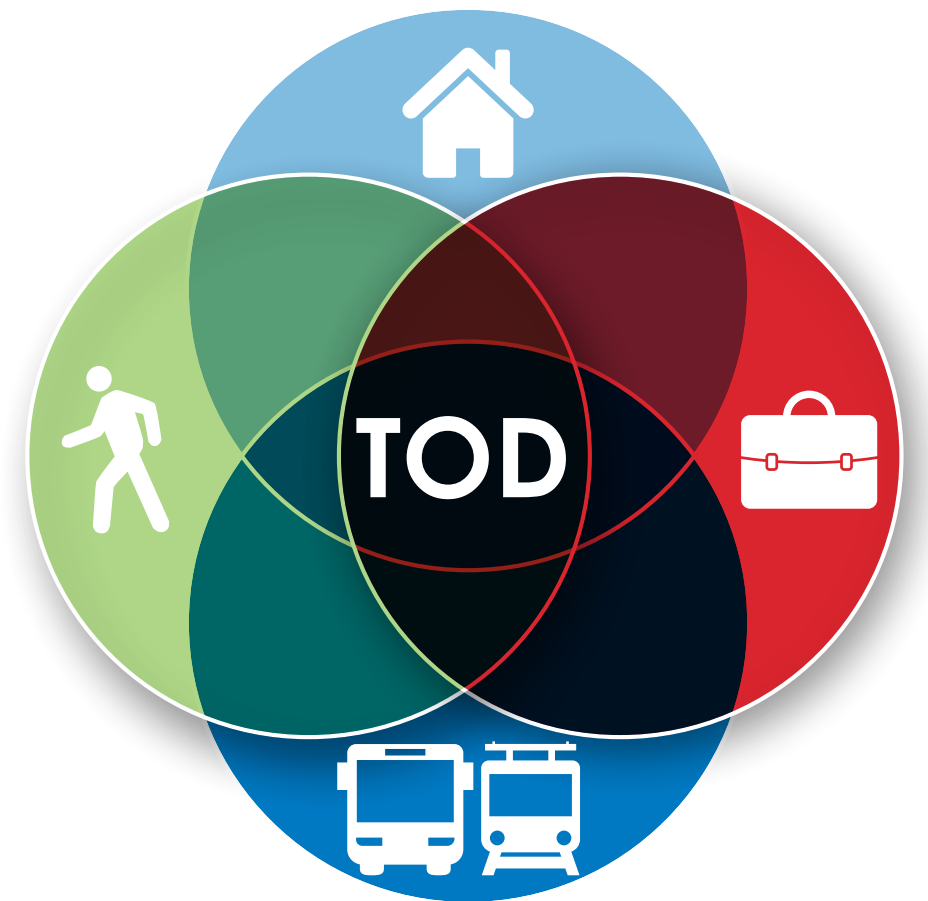
# INTRODUCTION

## SOUTH HILLS JUNCTION



### Transit-Oriented Development

- Dense
- Mix of uses
- Walkable
- Close to high-quality transit





# Port Authority Roles in TOD

- Sponsor
- Stakeholder
- Advocate





# Transit-Oriented Communities

- TOD Guidelines
- TOD Zoning
- First and Last Mile
- Station Improvement Program
- Joint Development



PORT AUTHORITY OF ALLEGHENY COUNTY  
TRANSIT-ORIENTED  
DEVELOPMENT GUIDELINES



# Station Improvement Program

## Phases

- **Station Evaluation**
- **Planning + Design**
- **Construction**
- **Repeat**





[TRIP TOOLS](#)[SEARCH](#)

# TRANSIT-ORIENTED COMMUNITIES

[Home](#) > [Inside Port Authority](#) > [Projects and Programs](#) > [Transit-Oriented Communities](#)



## TOD Guidelines



## Station Improvement Program

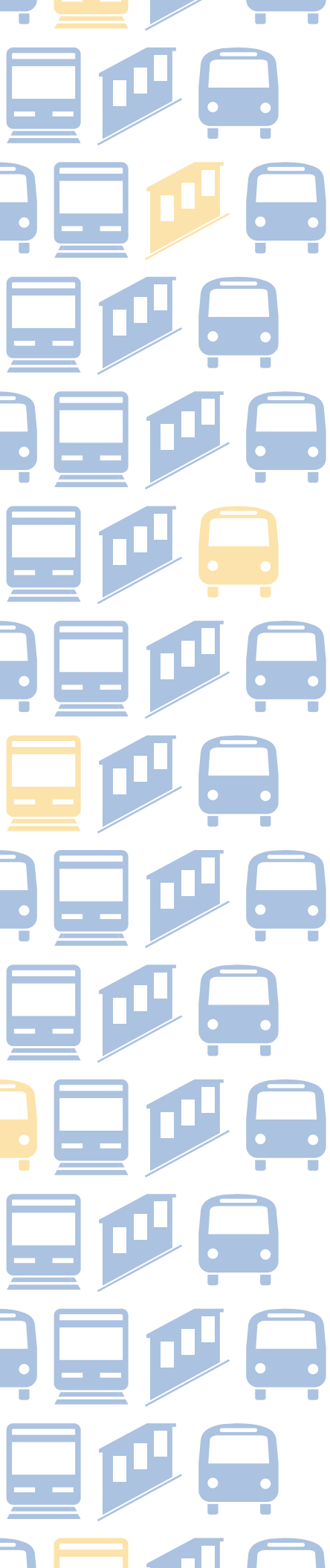


## TOD Zoning Best Practices



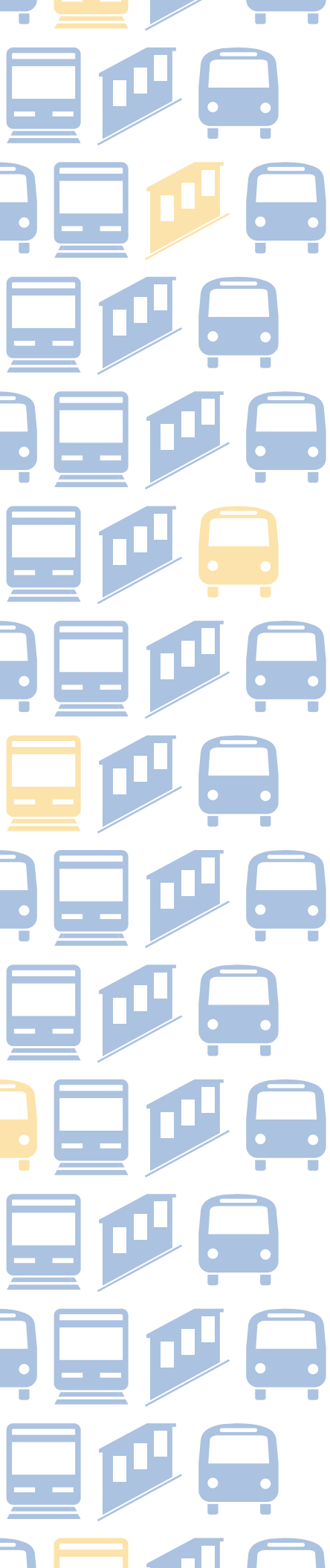
## First and Last Mile Program





- 1 Introduction**  
Moira Egler, TOC Project Manager
- 2 Study Area Context**  
Walkability and Network Reach  
Station Area Land Use  
Neighborhood Context  
PAAC Property Ownership  
Operational Site Uses  
South Hills Junction Focus Area
- 3 Previous Plan**  
2011 SMARTRID Corridor Study
- 4 Site Context**  
Gateways  
Circulation  
Slope  
Hydrology
- 5 Opportunities and Constraints**  
Site Assessment
- 6 TOD Opportunities**  
Transit-Oriented Development Sites
- 7 Next Steps**  
Process



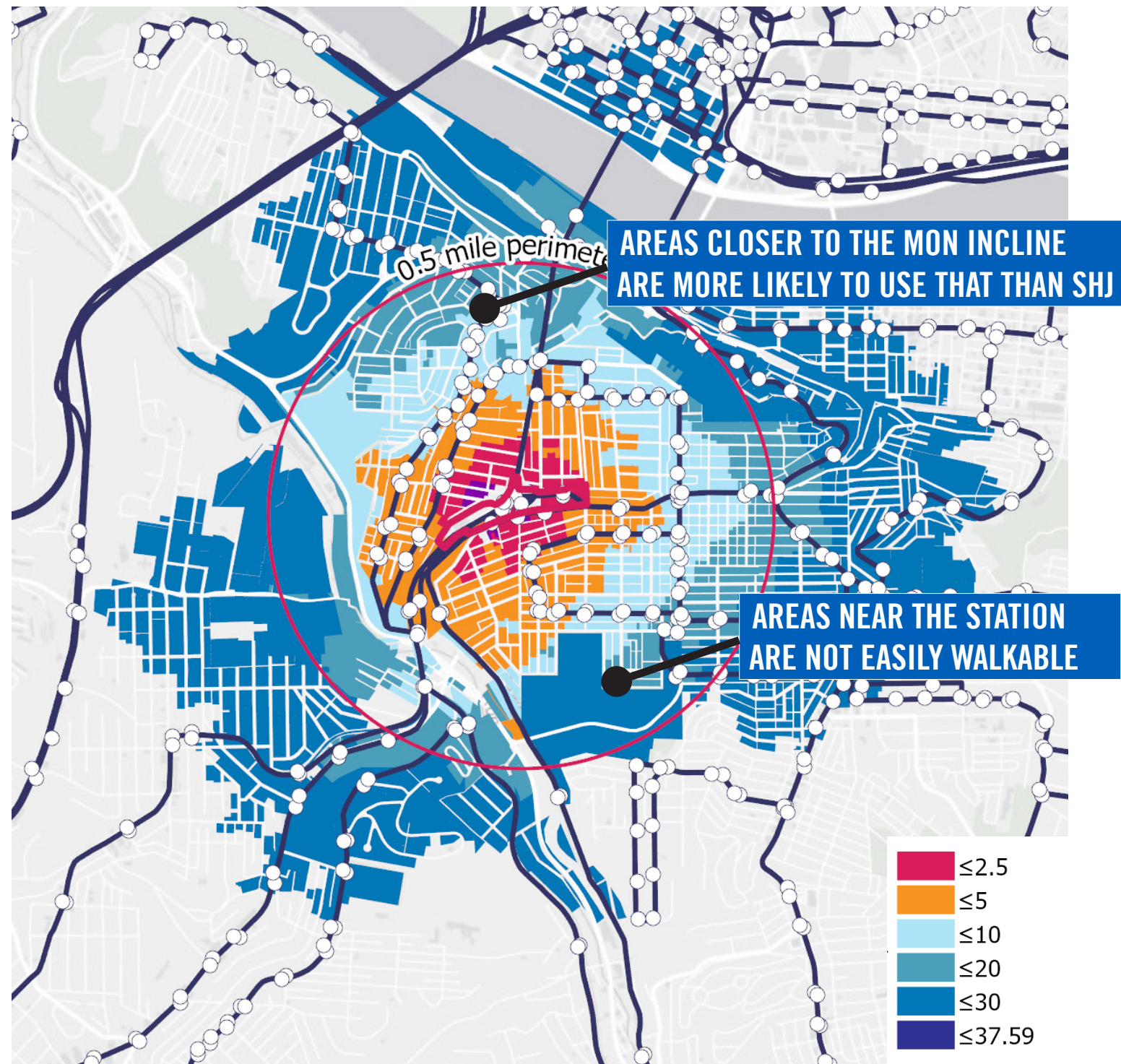


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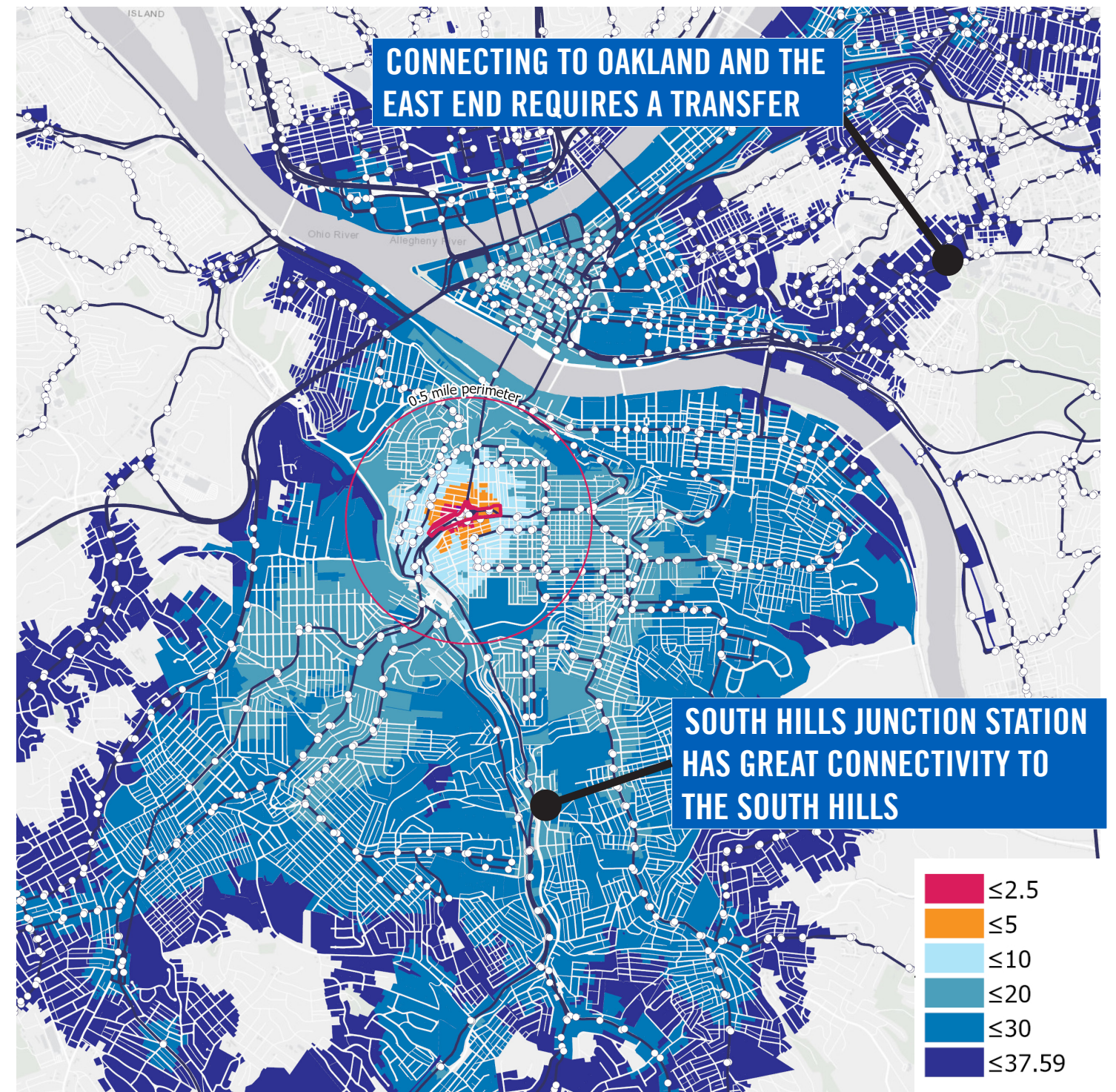


# STUDY AREA CONTEXT

## STATION AREA WALKABILITY AND NETWORK REACH



*How far can I travel by walking?*



*How far can I travel by taking transit and walking?*



# STUDY AREA CONTEXT

## STATION AREA LAND USE

### Land Use



### Satellite Reference Map



### Summary

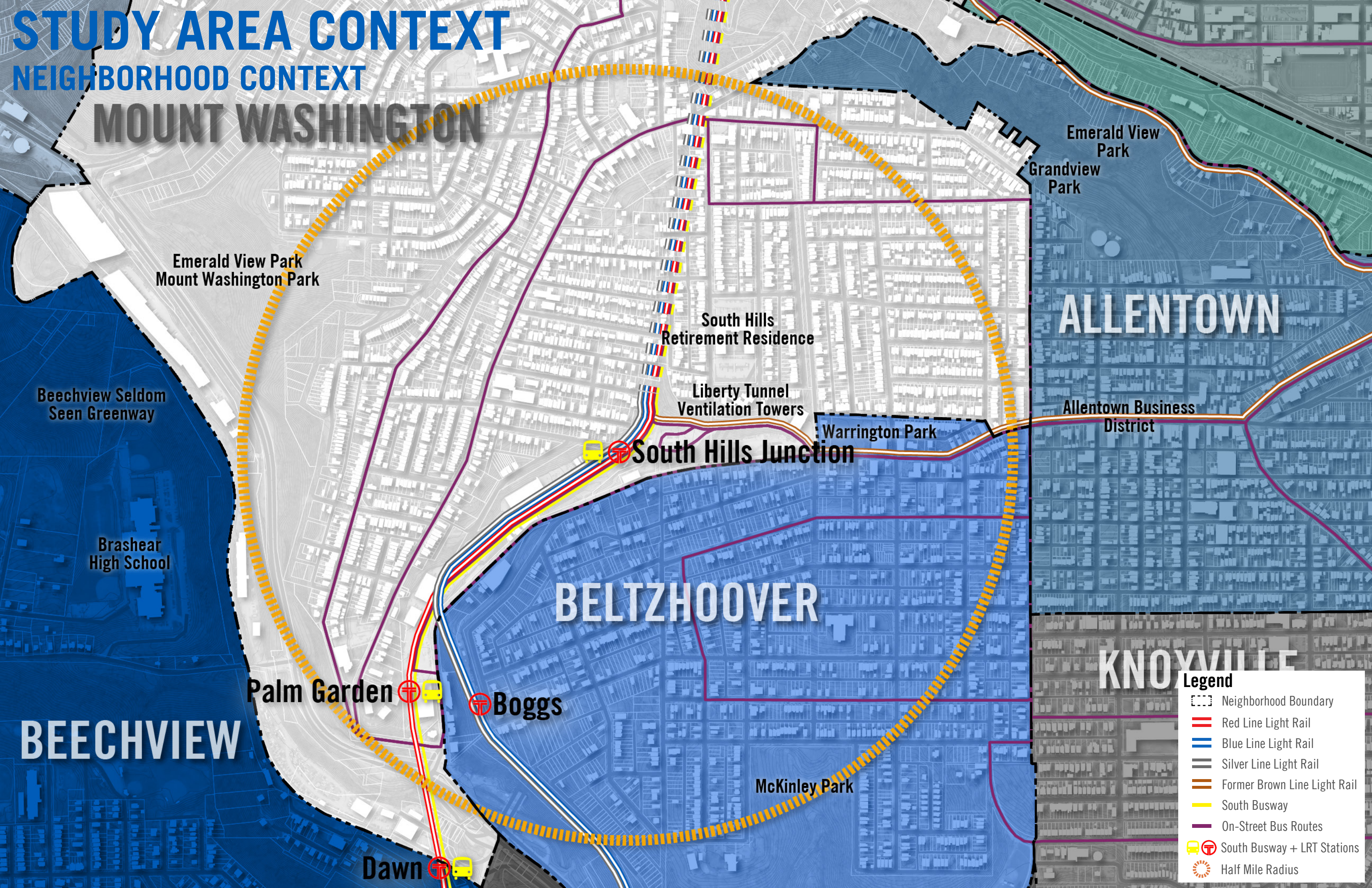
- The majority of the station area is single-family detached residential.
- Open spaces exist at the periphery of each neighborhood where hillsides create discontinuities in the overall urban fabric.



# STUDY AREA CONTEXT

## NEIGHBORHOOD CONTEXT

### MOUNT WASHINGTON



**Legend**

- Neighborhood Boundary
- Red Line Light Rail
- Blue Line Light Rail
- Silver Line Light Rail
- Former Brown Line Light Rail
- South Busway
- On-Street Bus Routes
- South Busway + LRT Stations
- Half Mile Radius



# STUDY AREA CONTEXT

## NEIGHBORHOOD CONTEXT: MOUNT WASHINGTON

STRONG URBAN RESIDENTIAL FABRIC  
ADJACENT TO THE PROJECT SITE

GOOD QUALITY RESIDENTIAL MAINTENANCE

CLEAR PEDESTRIAN ACCESS WITH  
SIDEWALKS AND CROSSWALKS





# STUDY AREA CONTEXT

## NEIGHBORHOOD CONTEXT: BELTZHOVER

ARTISTIC NEIGHBORHOOD CHARACTER

MAINTAIN CLEAR PEDESTRIAN WALKWAYS

INFILL OPPORTUNITIES TO THE URBAN  
RESIDENTIAL FABRIC





# STUDY AREA CONTEXT

## NEIGHBORHOOD CONTEXT: ALLENTOWN

ACTIVATED BUSINESS DISTRICT

STRONG ARTISTIC CHARACTER THROUGHOUT

WALKABLE COMMUNITY WITHIN 10 MINUTE  
WALK OF STATION AREA





# STUDY AREA CONTEXT

## NEIGHBORHOOD CONTEXT: HISTORICAL



Photo Credit: Brooklineconnection.com

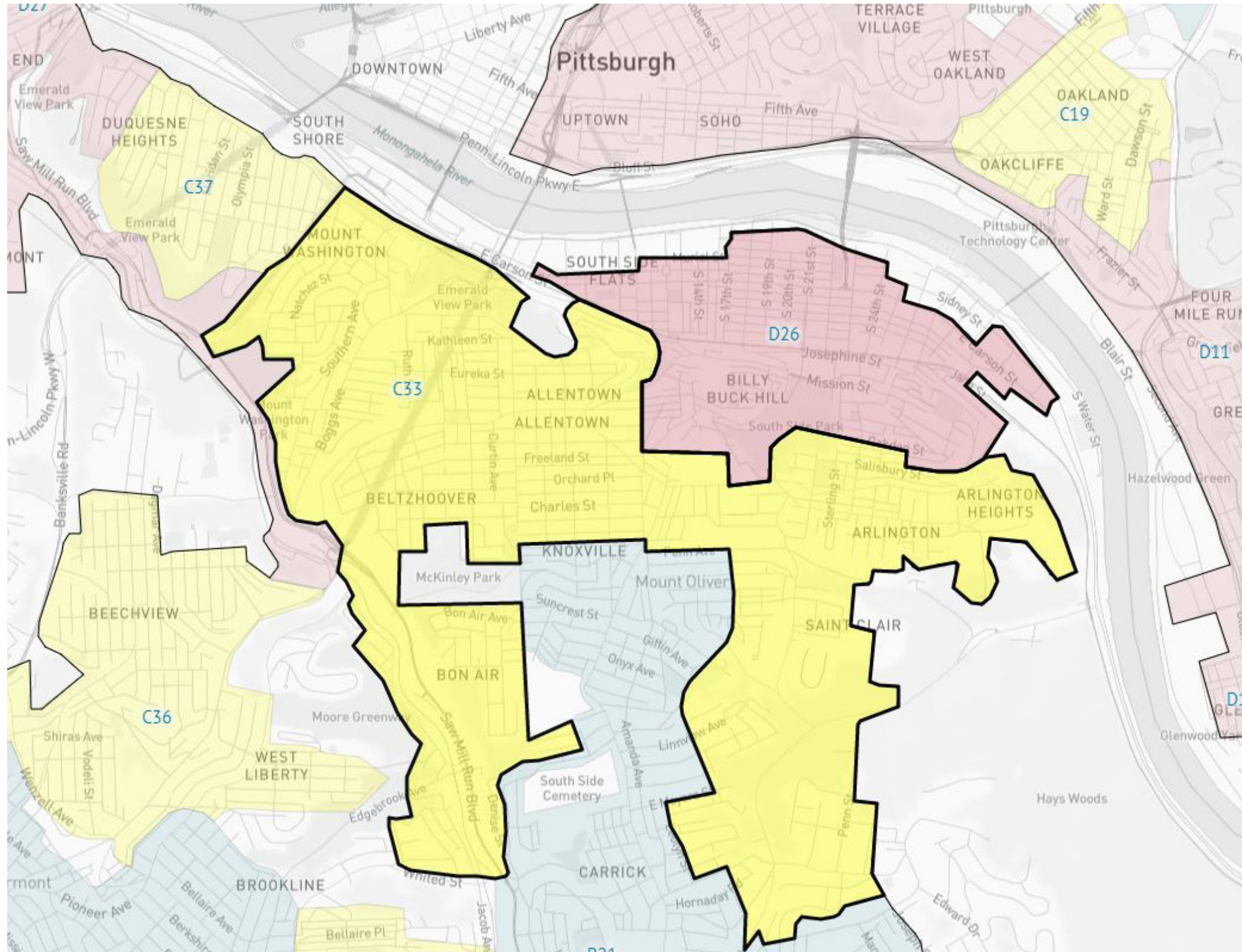
### Station Area Historical Context

- Mining was the area's first industry
- Coal Hill became Mt. Washington
- Boggs, Southern, & Warrington Aves early Pittsburgh to Washington, PA routes
- Mt. Washington inclines opened from 1870 and reached the Junction in 1892
- Passenger inclines opened in 1870 and reached the Junction in 1892
- Electric streetcar service began in Allentown in 1888
- Transit Tunnel opened in 1904, allowing transit to extend throughout the South Hills
- Local streetcar service through tunnel
- The 1977 South Busway and the 1985 Downtown Subway led to station reconfiguration and faster rail service into Pittsburgh



# STUDY AREA CONTEXT

## NEIGHBORHOOD CONTEXT: HISTORICAL



### Station Area Historical Context

- 1937 Home Owner's Loan Corporation (HOLC) mapping
- Developmental growth of these neighborhoods were directly effected by historical federal discriminatory practices of the HOLC “redlining” mapping
- Security grade designation a C for:
  - Racial mix
  - Unpaved streets
  - Poor construction
  - Terrain
- Mortgage funds were available for 40-50% of appraisal
- This practice amplified poverty and contributed to a wealth gap between neighborhoods



# STUDY AREA CONTEXT

## NEIGHBORHOOD CONTEXT: DEMOGRAPHICS

### MOUNT WASHINGTON

<b>LAND AREA (SQMI)</b> <b>1.14</b> (2% OF PITTSBURGH)	<b>POPULATION</b> <b>8,504</b> (3% OF PITTSBURGH)	<b>JOB</b> <b>972</b> (0.30% OF PITTSBURGH)	<b>HOUSING UNITS</b> <b>5,434</b> (3.50% OF PITTSBURGH)	<b>MEDIAN HH INCOME</b> <b>\$50,500</b> (\$44,000 PITTSBURGH MEDIAN)
<b>NON-AUTO COMMUTERS</b> <b>38%</b> (44% CITY WIDE)	<b>COST BURDENED RENTERS</b> <b>38%</b> (20% CITY WIDE)	<b>INTERSECTION DENSITY</b> <b>236</b> (175 PITTSBURGH AVERAGE)	<b>ACRES OF VACANT LAND</b> <b>43</b> (2,323 ACRES CITY WIDE)	<b>GHG PER CAPITA</b> <b>5.50</b> (5 PITTSBURGH AVERAGE)

### BELTZHOOVER

<b>LAND AREA (SQMI)</b> <b>0.42</b> (0.75% OF PITTSBURGH)	<b>POPULATION</b> <b>2,717</b> (1% OF PITTSBURGH)	<b>JOB</b> <b>487</b> (0.15% OF PITTSBURGH)	<b>HOUSING UNITS</b> <b>1,477</b> (1% OF PITTSBURGH)	<b>MEDIAN HH INCOME</b> <b>\$33,000</b> (\$44,000 PITTSBURGH MEDIAN)
<b>NON-AUTO COMMUTERS</b> <b>40%</b> (44% CITY WIDE)	<b>COST BURDENED RENTERS</b> <b>60%</b> (20% CITY WIDE)	<b>INTERSECTION DENSITY</b> <b>311</b> (175 PITTSBURGH AVERAGE)	<b>ACRES OF VACANT LAND</b> <b>44</b> (2,323 ACRES CITY WIDE)	<b>GHG PER CAPITA</b> <b>5.50</b> (5 PITTSBURGH AVERAGE)

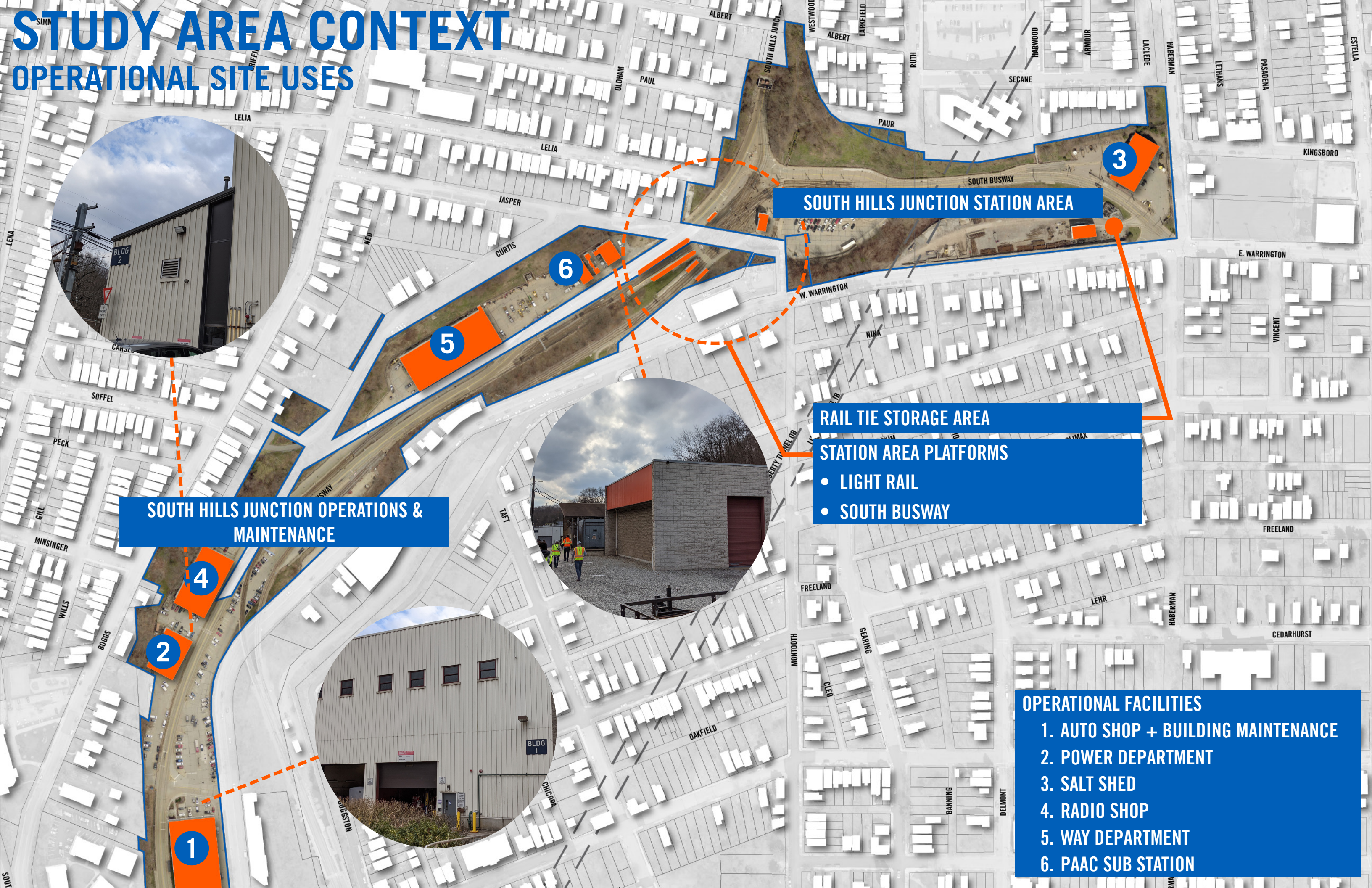
### ALLENTOWN

<b>LAND AREA (SQMI)</b> <b>0.29</b> (0.50% OF PITTSBURGH)	<b>POPULATION</b> <b>2,320</b> (0.75% OF PITTSBURGH)	<b>JOB</b> <b>249</b> (0.10% OF PITTSBURGH)	<b>HOUSING UNITS</b> <b>1,210</b> (1% OF PITTSBURGH)	<b>MEDIAN HH INCOME</b> <b>\$33,500</b> (\$44,000 PITTSBURGH MEDIAN)
<b>NON-AUTO COMMUTERS</b> <b>45%</b> (44% CITY WIDE)	<b>COST BURDENED RENTERS</b> <b>49%</b> (20% CITY WIDE)	<b>INTERSECTION DENSITY</b> <b>410</b> (175 PITTSBURGH AVERAGE)	<b>ACRES OF VACANT LAND</b> <b>25</b> (2,323 ACRES CITY WIDE)	<b>GHG PER CAPITA</b> <b>4.50</b> (5 PITTSBURGH AVERAGE)



# STUDY AREA CONTEXT

## OPERATIONAL SITE USES



### SOUTH HILLS JUNCTION STATION AREA

### RAIL TIE STORAGE AREA

### STATION AREA PLATFORMS

- LIGHT RAIL
- SOUTH BUSWAY

### SOUTH HILLS JUNCTION OPERATIONS & MAINTENANCE

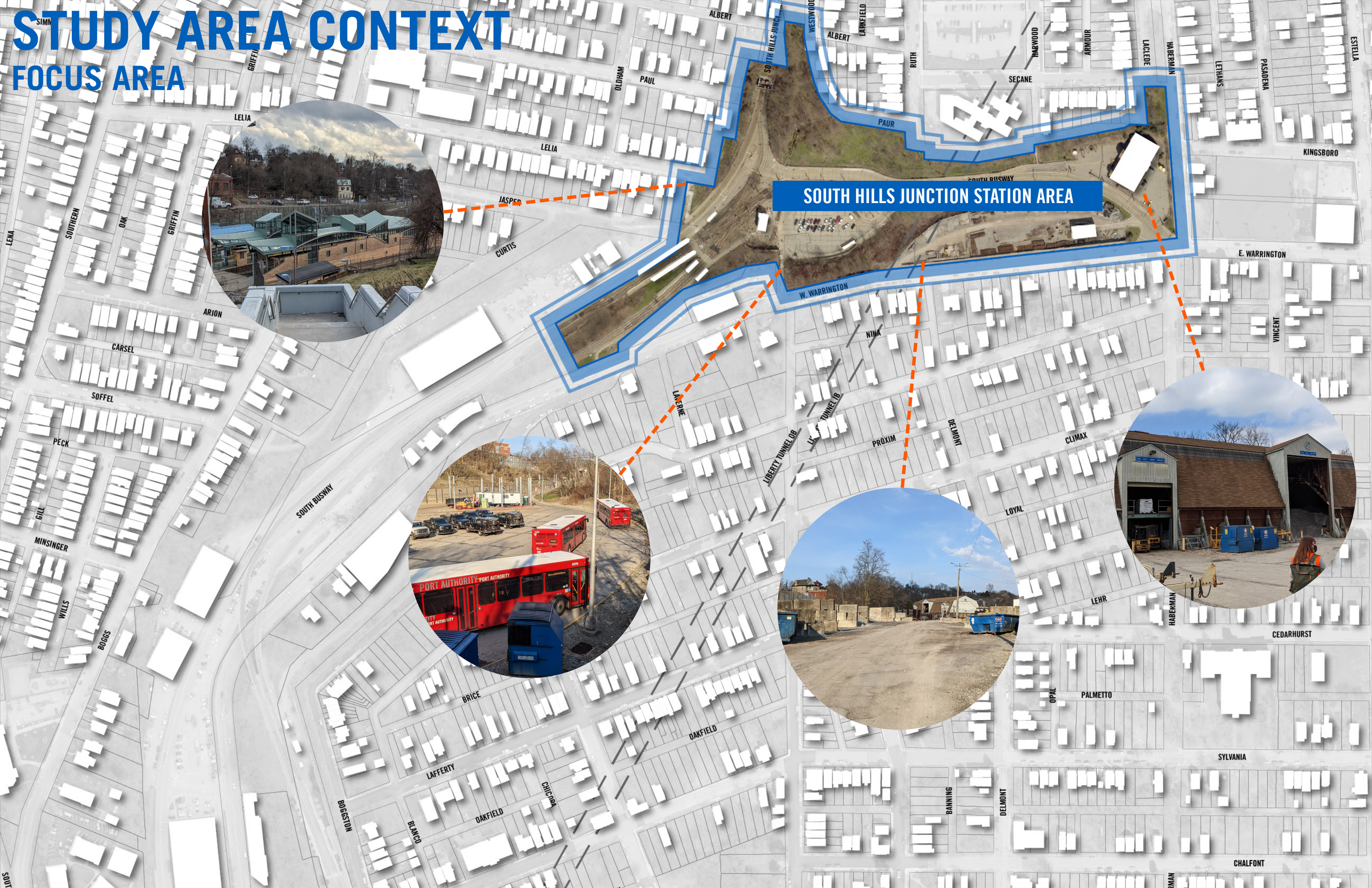
### OPERATIONAL FACILITIES

1. AUTO SHOP + BUILDING MAINTENANCE
2. POWER DEPARTMENT
3. SALT SHED
4. RADIO SHOP
5. WAY DEPARTMENT
6. PAAC SUB STATION



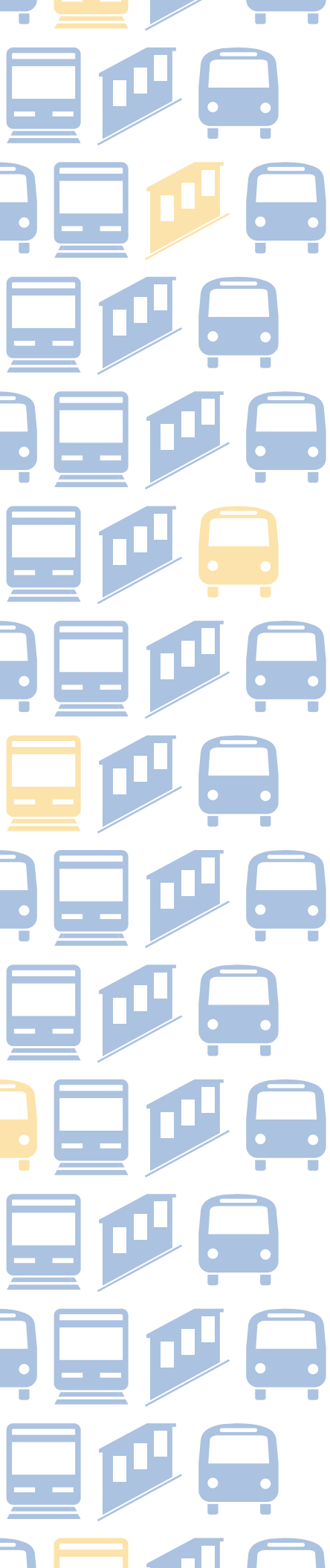
# STUDY AREA CONTEXT

## FOCUS AREA



SOUTH HILLS JUNCTION STATION AREA





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- 7** Next Steps  
Process



# PREVIOUS PLAN

## 2011 SMART TRID STUDY

49

ideas

insights



# collaborative MAP



Ideas for new development near South Hills Junction from the Collaborative Map

Study participants offered ideas both about parking at South Hills Junction (such as a parking garage) and about transit-oriented development.

Of particular relevance to this station area plan, some considerations include:

- Improved connectivity to the station area from surrounding neighborhoods
- New mixed-use development and retail that can serve both the community and commuters.



# PREVIOUS PLAN

## 2011 SMART TRID STUDY

### On-site development opportunities:

- Site 1: Salt Shed
- Site 2: Rail Tie Storage Site
- Site 3: M-Loop Site

### *Development Scenario 1*



- Surface Parking: 47 spaces
- Structured Parking: 0 spaces
- 27,000 SF of community, healthcare, and recreational facilities
- 50 units of multi-family housing
- 25 units of town home housing

### *Development Scenario 2*



- Surface Parking: 0 spaces
- Structured Parking: 165 spaces
- 85,000 SF of Retail
- 41 Units of multi-family housing
- 25 units of town home housing

### *Development Scenario 3*



- Surface Parking: 91 Spaces
- Structured Parking: 165 spaces
- 127,000 SF of Retail
- 51 Units of multi-family housing
- 23 units of town home housing



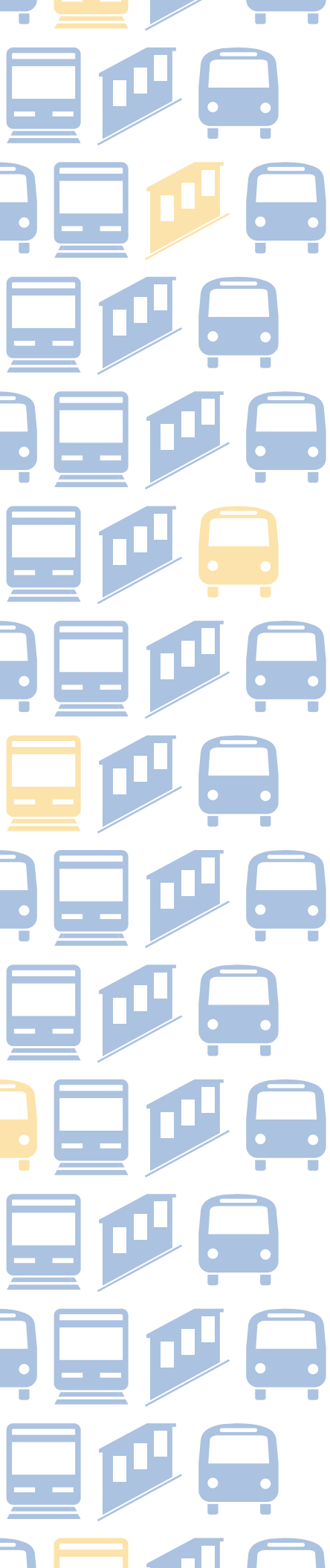


# QUESTIONS?



Port Authority





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# SITE CONTEXT

## GATEWAYS

SECANE AVENUE (HARWOOD WAY)  
NORTH PEDESTRIAN STAIR ACCESS

ABANDONED STAIR ACCESS FROM PAUR AND  
ALBERT STREETS

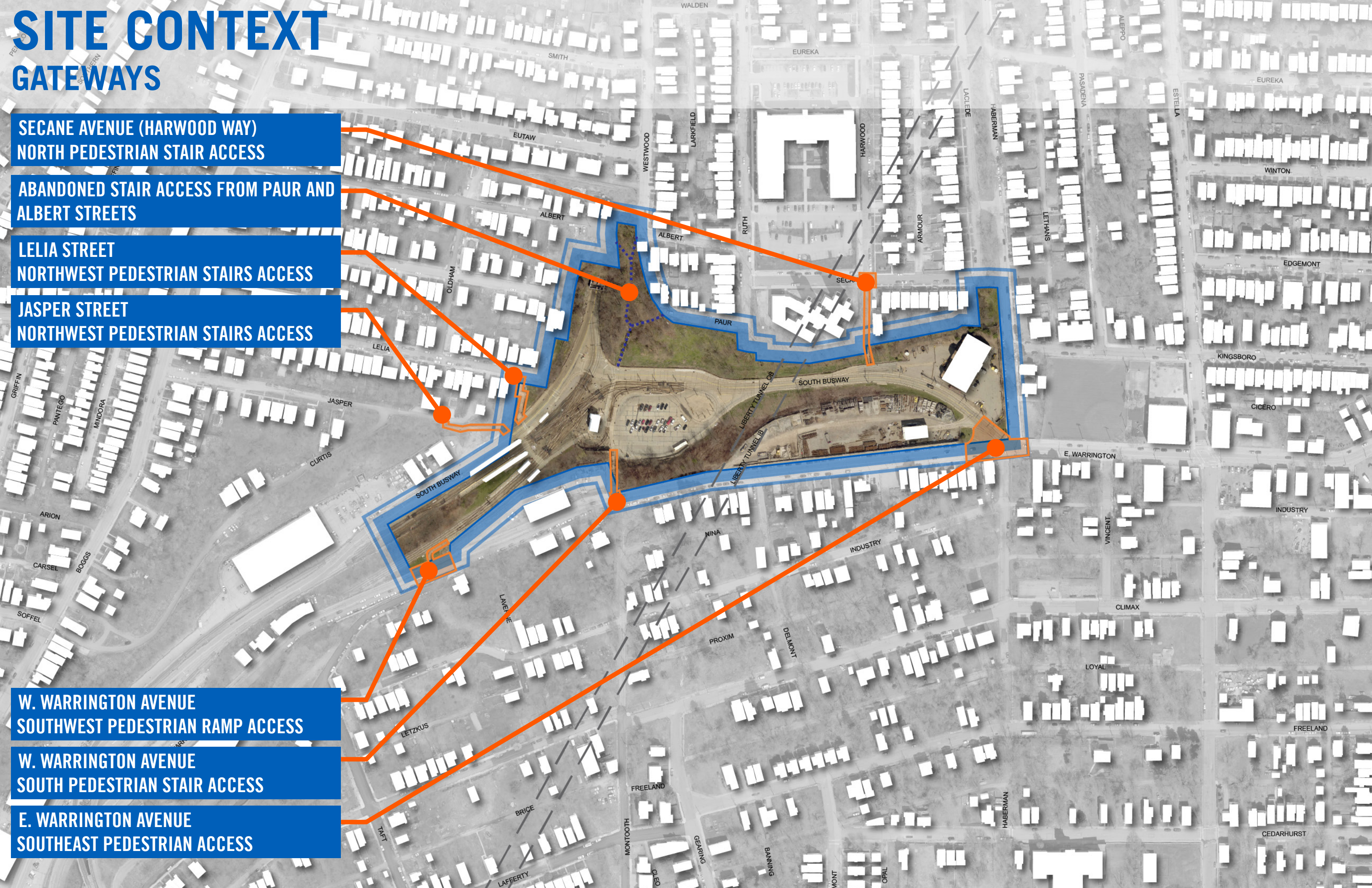
LELIA STREET  
NORTHWEST PEDESTRIAN STAIRS ACCESS

JASPER STREET  
NORTHWEST PEDESTRIAN STAIRS ACCESS

W. WARRINGTON AVENUE  
SOUTHWEST PEDESTRIAN RAMP ACCESS

W. WARRINGTON AVENUE  
SOUTH PEDESTRIAN STAIR ACCESS

E. WARRINGTON AVENUE  
SOUTHEAST PEDESTRIAN ACCESS





# SITE CONTEXT

## LELIA STREET STAIR

LIGHT RAIL PLATFORM STRUCTURE

SOUTH BUSWAY PLATFORM STRUCTURE

AGED LIGHTING INFRASTRUCTURE

CHANNELIZED STORMWATER  
INFRASTRUCTURE

UPDATED STAIR, RAILING, AND FENCING





# SITE CONTEXT

## LELIA STREET STAIR

UPGRADED LED LIGHTING PROVIDES  
COMFORTABLE ACCESS POINT





# SITE CONTEXT

## JASPER STREET STAIR

OVERGROWN VEGETATION

LACK OF GATEWAY SIGNAGE AND  
WAYFINDING

AGING, UNWELCOMING SITE FURNISHINGS  
(LIGHTING, RAILING, FENCING)

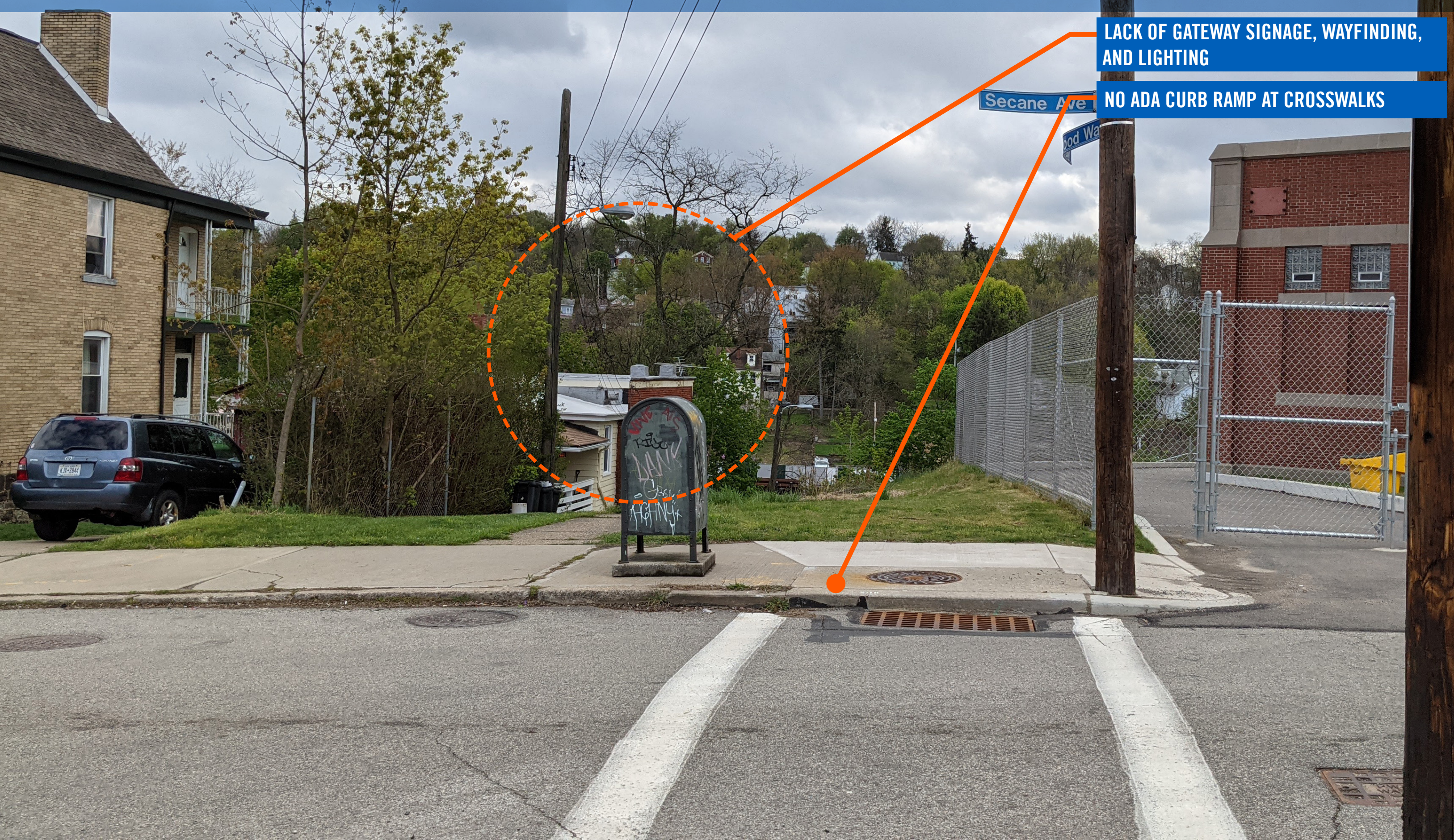
CANOPY OVER LIGHT RAIL PLATFORM





# SITE CONTEXT

## SECANE AVENUE (HARWOOD WAY) STAIR



LACK OF GATEWAY SIGNAGE, WAYFINDING,  
AND LIGHTING

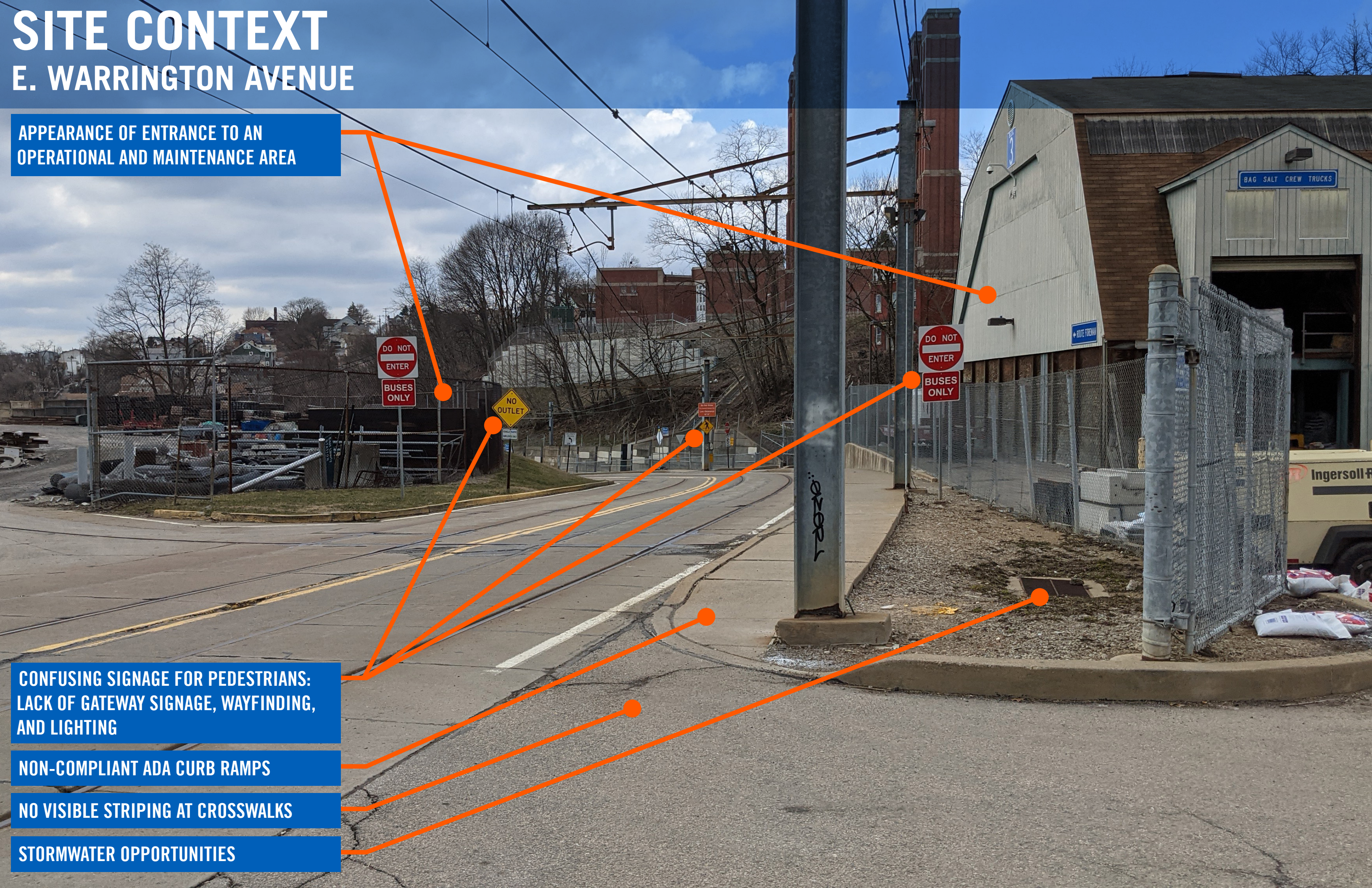
NO ADA CURB RAMP AT CROSSWALKS



# SITE CONTEXT

## E. WARRINGTON AVENUE

APPEARANCE OF ENTRANCE TO AN  
OPERATIONAL AND MAINTENANCE AREA



CONFUSING SIGNAGE FOR PEDESTRIANS:  
LACK OF GATEWAY SIGNAGE, WAYFINDING,  
AND LIGHTING

NON-COMPLIANT ADA CURB RAMPS

NO VISIBLE STRIPING AT CROSSWALKS

STORMWATER OPPORTUNITIES



# SITE CONTEXT

## W. WARRINGTON AVENUE AT MONTTOOTH STREET STAIR



PORT AUTHORITY CONTROL TOWER

LACK OF GATEWAY SIGNAGE, AND  
WAYFINDING

NON ADA OR IBC COMPLIANT STAIRS: OPEN  
RISERS

VISIBLE STATE OF REPAIR NEEDS



# SITE CONTEXT

## W. WARRINGTON AVENUE AT BOGGSTON AVENUE RAMP

VISIBLE STATE OF REPAIR NEEDS

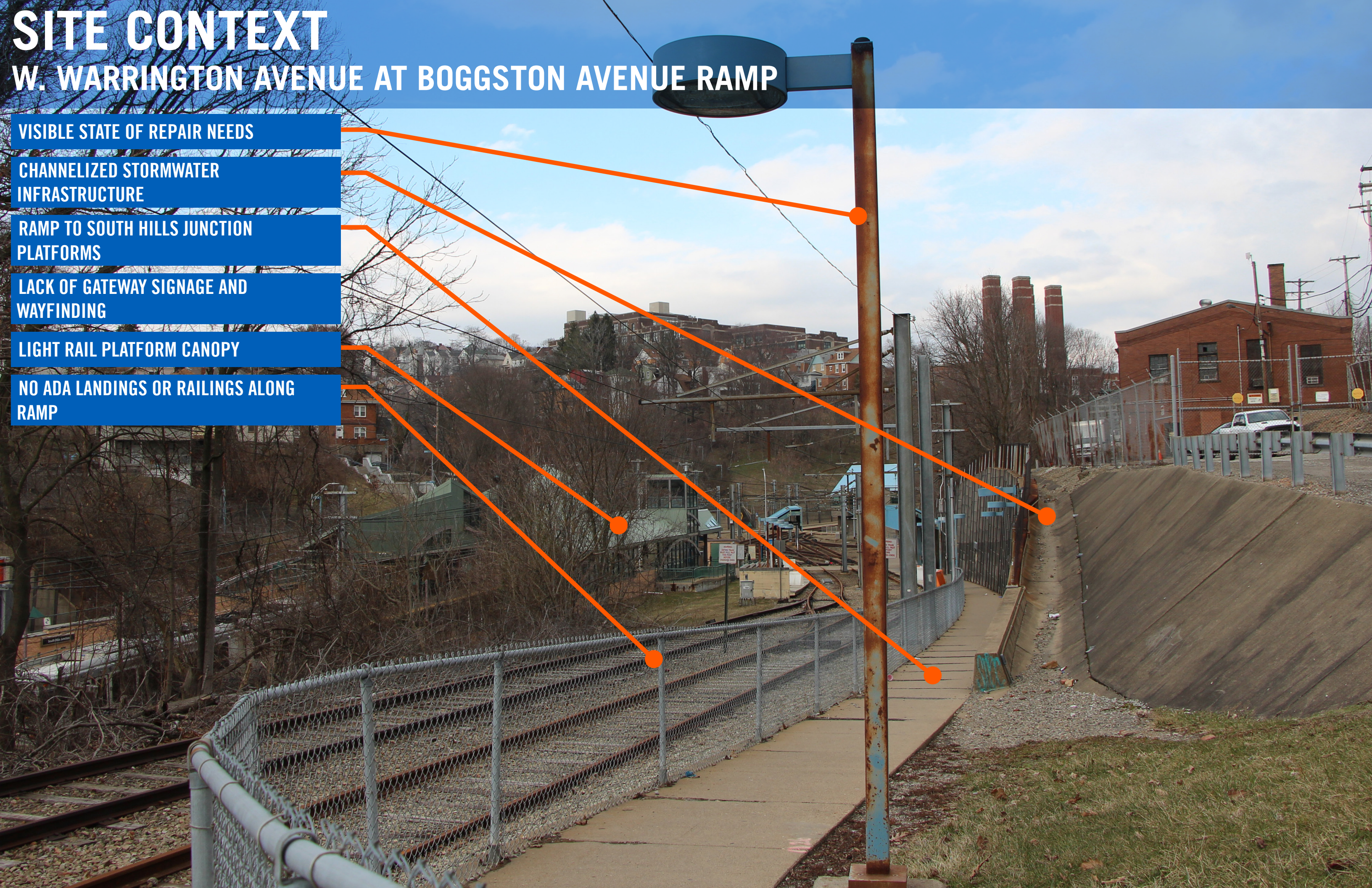
CHANNELIZED STORMWATER  
INFRASTRUCTURE

RAMP TO SOUTH HILLS JUNCTION  
PLATFORMS

LACK OF GATEWAY SIGNAGE AND  
WAYFINDING

LIGHT RAIL PLATFORM CANOPY

NO ADA LANDINGS OR RAILINGS  
ALONG RAMP





# SITE CONTEXT

## STATION AREA AT NIGHT

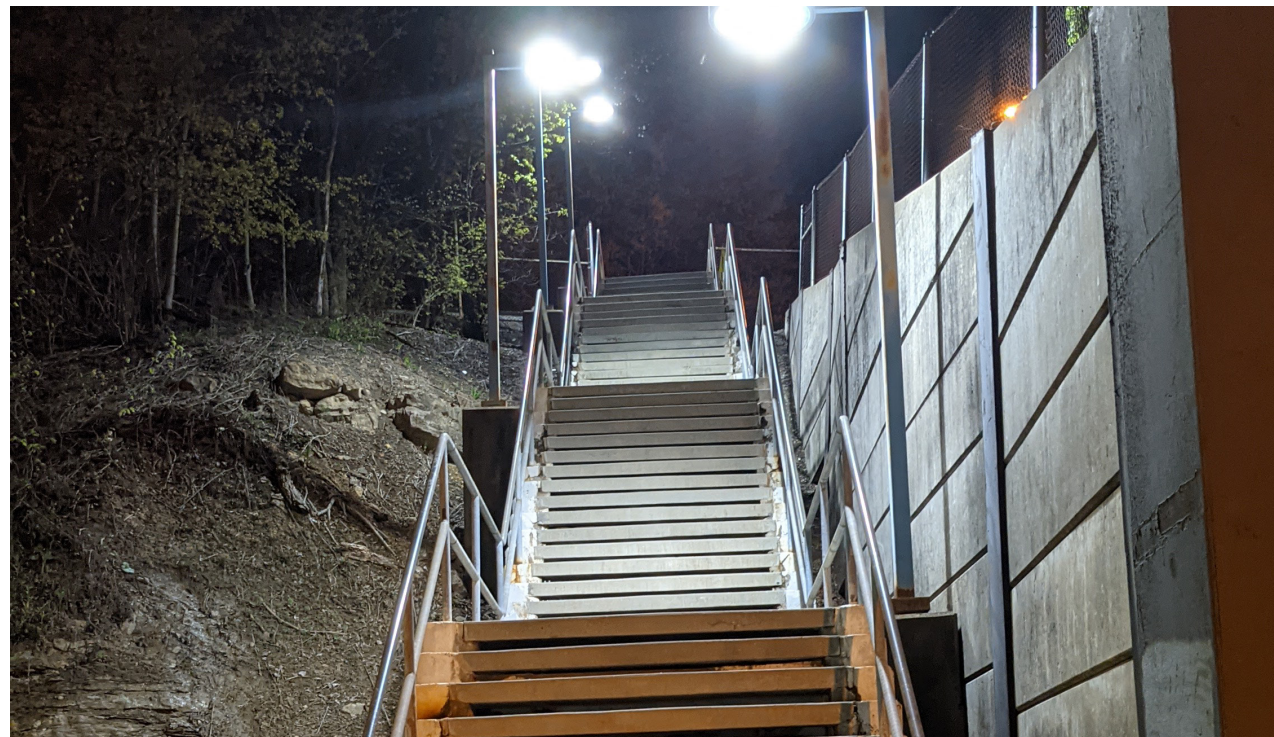
UPGRADED LED LIGHTING BY  
THE PORT AUTHORITY PROVIDES  
COMFORTABLE ACCESS POINT



JASPER STREET STAIR



E. WARRINGTON AVENUE



MONTOOTH STREET STAIR



ACCESS RAMP FROM W. WARRINGTON AVENUE



# SITE CONTEXT

## CIRCULATION

MOUNT WASHINGTON NEIGHBORHOOD  
ACCESS NODE

OBSERVED DESIRED PATH

PEDESTRIAN CONFLICT AREA

MOUNT WASHINGTON NEIGHBORHOOD  
ACCESS NODE

BELTZHOVER NEIGHBORHOOD ACCESS  
NODE

PEDESTRIAN CONFLICT AREA

BELTZHOVER NEIGHBORHOOD ACCESS  
NODE WITH UNCONTROLLED CROSSWALK

ALLENTOWN NEIGHBORHOOD ACCESS  
NODE

### Legend

- |                        |                      |
|------------------------|----------------------|
| Area of Interest       | Sidewalk Access      |
| Red Line Light Rail    | ADA Access           |
| Blue Line Light Rail   | Stair Access         |
| Silver Line Light Rail | Perimeter Access     |
| On-Street Bus Routes   | Abandoned Access     |
| South Busway           | Pedestrian Conflicts |
| Light Rail Stations    | PAAC Staff Only      |
| Bus Stops              |                      |



# SITE CONTEXT

## SLOPE

STEEP SLOPES SURROUNDING STATION

LIMITED ADA STATION ACCESS



### Legend

- Area of Interest
- Liberty Tunnels
- Structures
- 0-5% Slope
- 6-10% Slope
- 11-15% Slope
- 16%> Slope



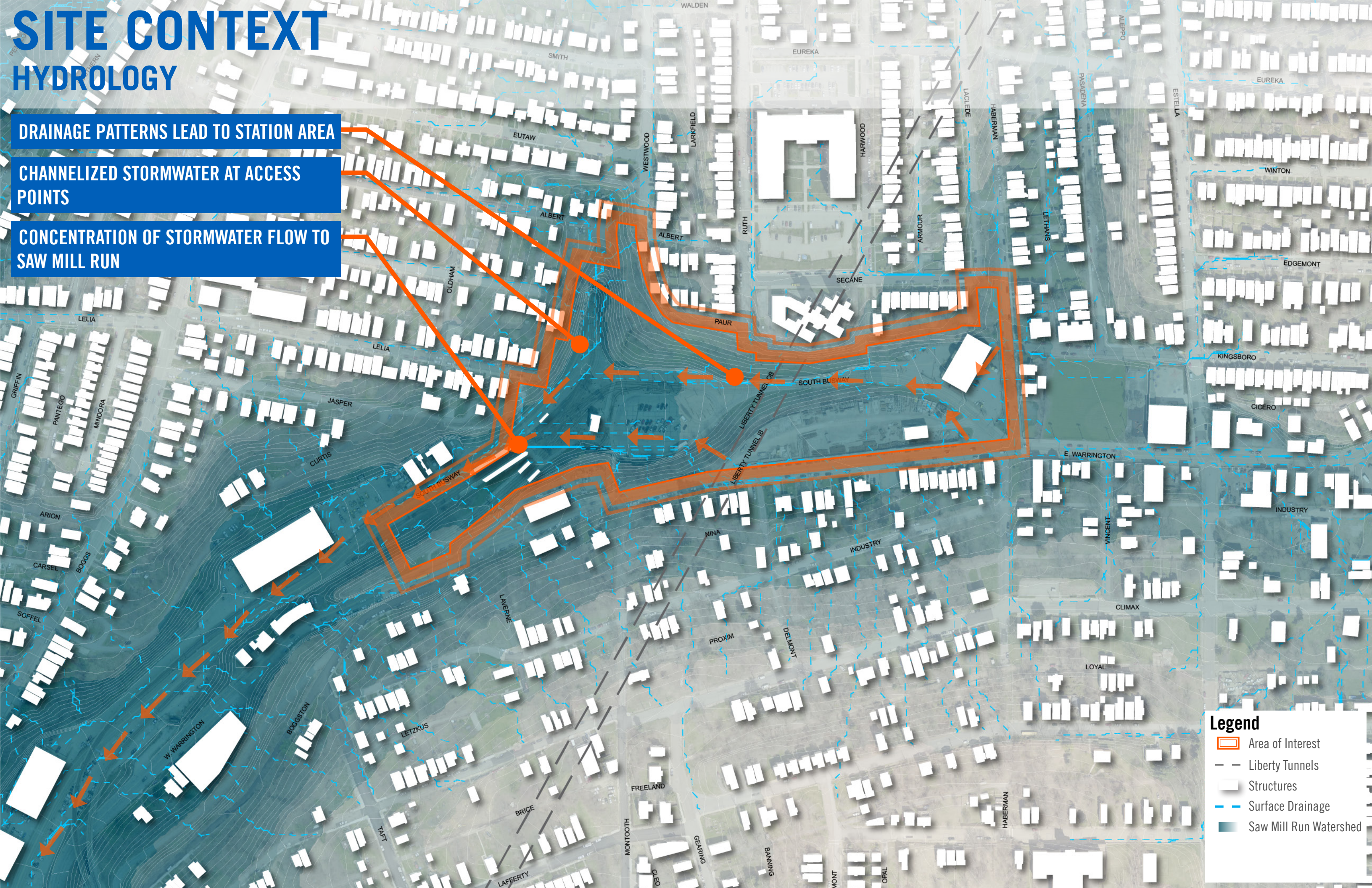
# SITE CONTEXT

## HYDROLOGY

DRAINAGE PATTERNS LEAD TO STATION AREA

CHANNELIZED STORMWATER AT ACCESS  
POINTS

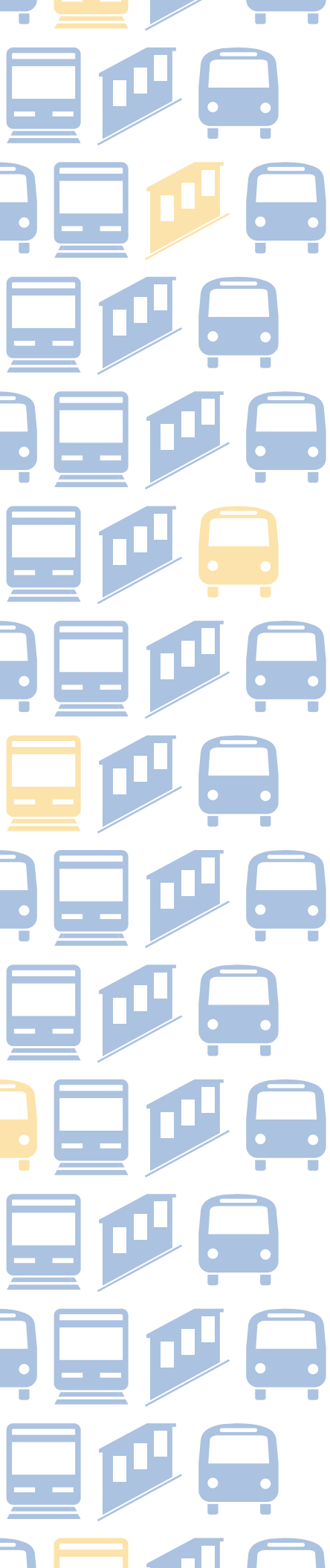
CONCENTRATION OF STORMWATER FLOW TO  
SAW MILL RUN



### Legend

- Area of Interest
- Liberty Tunnels
- Structures
- Surface Drainage
- Saw Mill Run Watershed





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# OPPORTUNITIES + CONSTRAINTS

## SALT SHED AREA



### OPPORTUNITIES:

- Potential TOD area
  - Affordable housing
  - Better ADA connection to neighborhoods
- Relocation of salt shed would allow for increased capacity needs for PAAC

### CONSTRAINTS:

- Port Authority would need to relocate salt shed facility





# OPPORTUNITIES + CONSTRAINTS

## RAIL TIE LAY DOWN AREA



### OPPORTUNITIES:

- Potential TOD area
  - Affordable housing
  - Reduce gaps in urban fabric
  - Create an ADA connection to the station area
- Create a safer environment with regular site use

### CONSTRAINTS:

- Port Authority would need to relocate rail tie storage facility
- Extensive excavation could be cost prohibitive





# OPPORTUNITIES + CONSTRAINTS

## SITE CONNECTION TO E. WARRINGTON AVENUE



### OPPORTUNITIES:

- Light rail infrastructure for Warrington Avenue detour
- Improving safety at Warrington Avenue and Haberman intersection
- Public art installation along wall

### CONSTRAINTS:

- Pile lagging wall along pedestrian walkway with narrow sidewalks
- Mount Washington accessibility connection





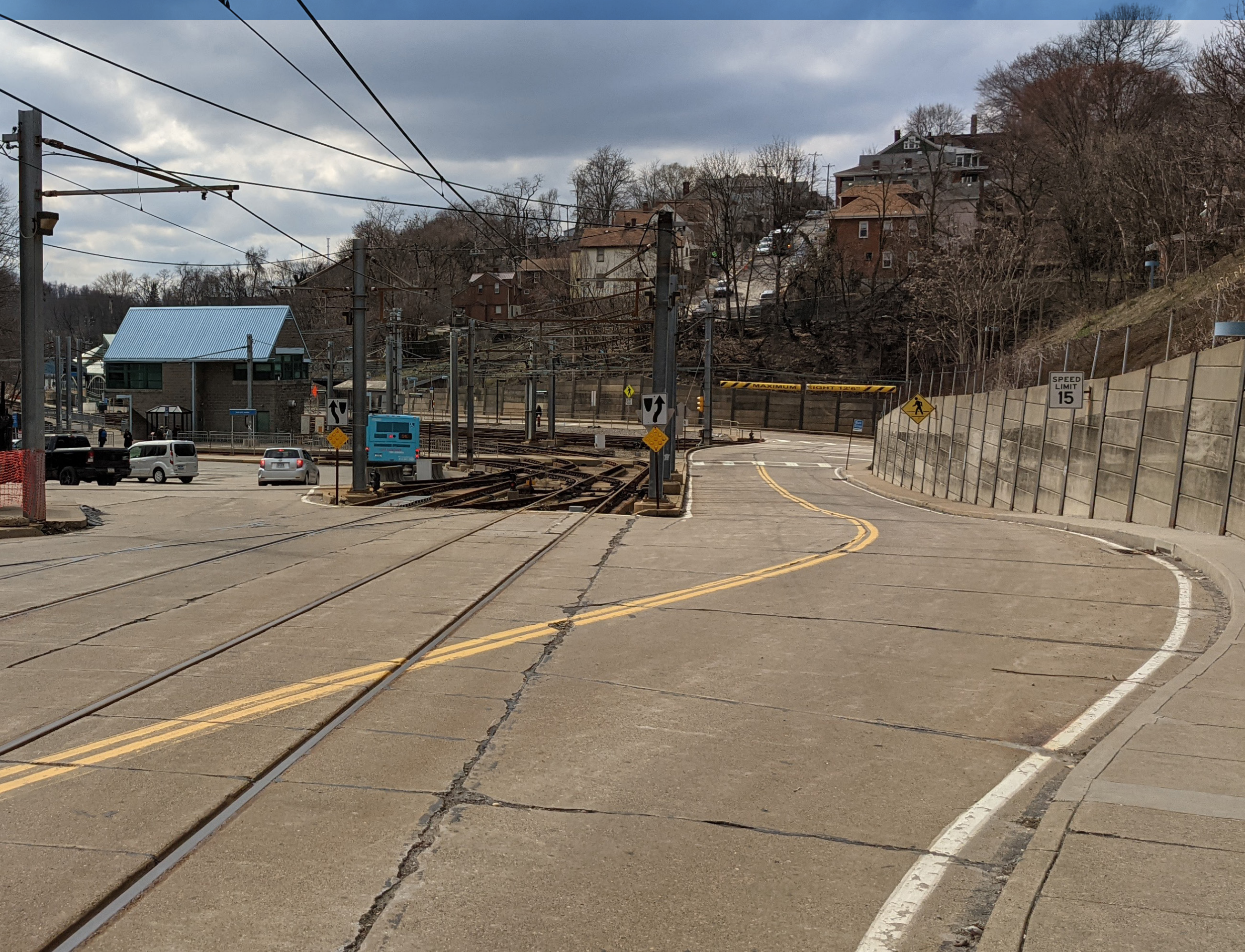
# OPPORTUNITIES + CONSTRAINTS

## STAFF PARKING AND EAST ACCESS TO TRANSIT TUNNEL



### OPPORTUNITIES:

- Removal of unused rail at M Loop for circulation enhancements
- Rebuilding wye rail connection



### CONSTRAINTS:

- Pedestrian path not clear
- Lack of adequate lighting for user safety
  - Wall lights currently not operational
- Electrical and other utilities throughout the station area and under the Transit Tunnel lanes



# OPPORTUNITIES + CONSTRAINTS

## STATION PLATFORMS



### OPPORTUNITIES:

- High pass-through ridership volumes on all light rail lines
- Integration of light rail and bus transit structure architecture
- Create a unified wayfinding

### CONSTRAINTS:

- Pedestrian and transit conflict areas
- Potentially confusing new user experience
  - Multiple station platforms (new + old)
  - Wayfinding signage
- Safety concerns
  - Not visible from outside station area





# OPPORTUNITIES + CONSTRAINTS

## ADA ACCESS ALONG W. WARRINGTON AVENUE



### OPPORTUNITIES:

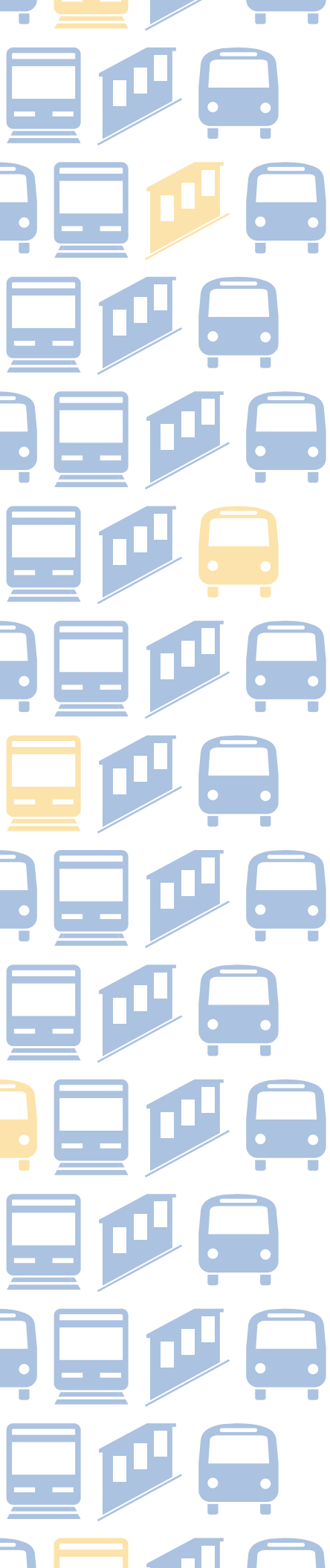
- Enhance bus and rail transit connections for transfers and service disruptions
- Streetscape improvements to improve pedestrian safety and access. Existing conditions include:
  - Crosswalks

### CONSTRAINTS:

- Station area bounded by Warrington Avenue, an arterial with over 7,000 vehicles per day
- Difficult pedestrian connections
- Limited ADA access
- Narrow walkways and areas of low visibility for desired road crossings







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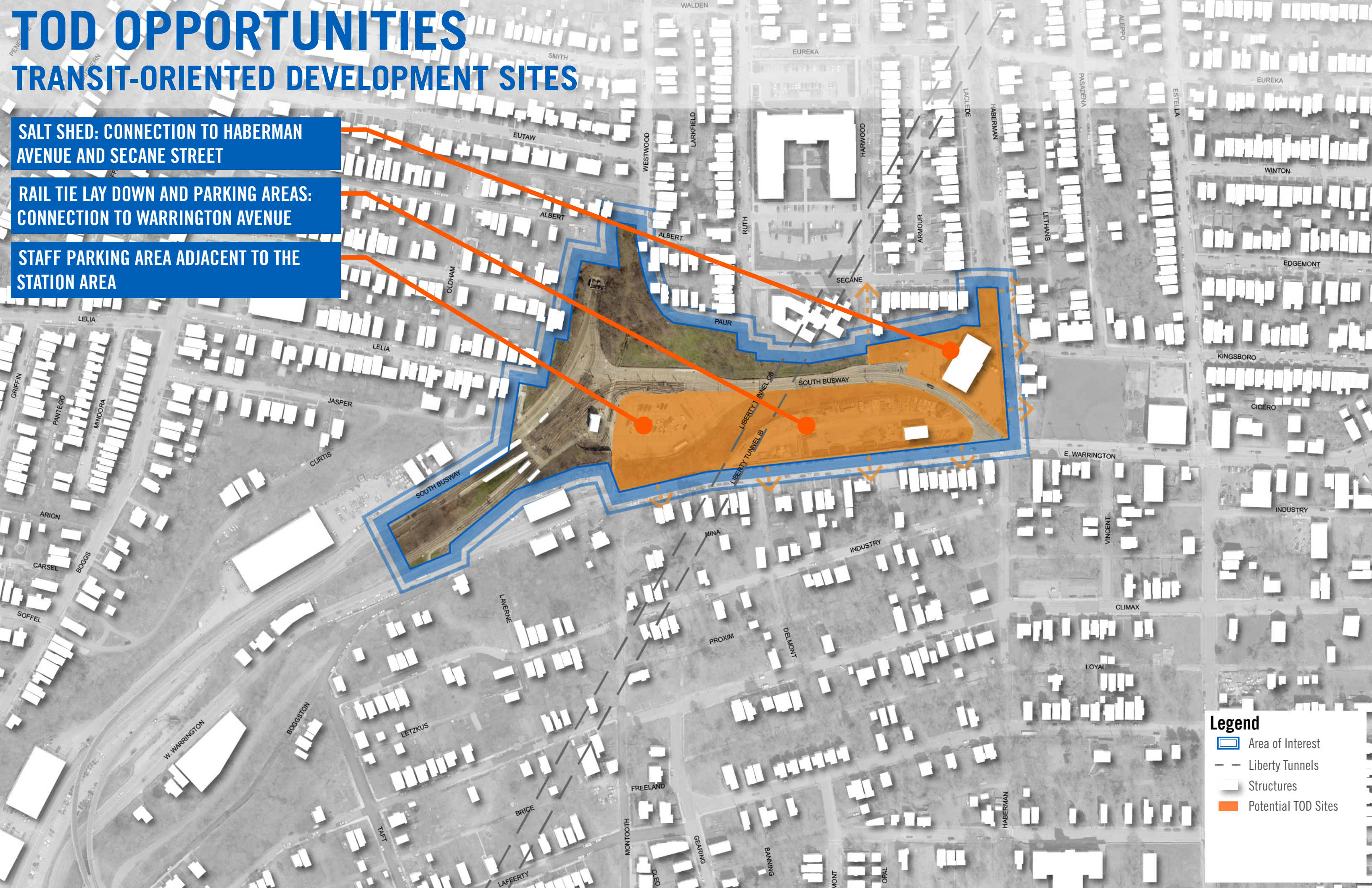
# TOD OPPORTUNITIES

## TRANSIT-ORIENTED DEVELOPMENT SITES

SALT SHED: CONNECTION TO HABERMAN AVENUE AND SECANE STREET

RAIL TIE LAY DOWN AND PARKING AREAS: CONNECTION TO WARRINGTON AVENUE

STAFF PARKING AREA ADJACENT TO THE STATION AREA



### Legend

- Area of Interest
- Liberty Tunnels
- Structures
- Potential TOD Sites







# NEXT STEPS

## SOUTH HILLS JUNCTION TIMELINE

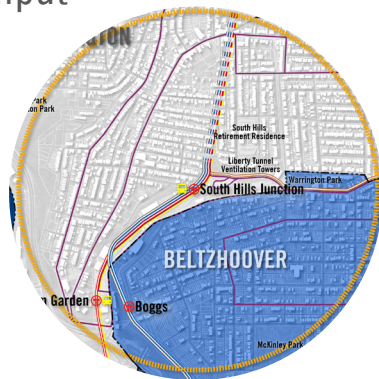


1

**March '21**  
Kick off - existing conditions documentation & analysis

2

**May '21**  
First round of stakeholder meetings: gain user input



3

**July '21**  
Vision development + ongoing stakeholder coordination



4

**August '21**  
Second round stakeholder meetings: review initial concepts



5

**October '21**  
Implementation Strategy - finalize plans



6

**November '21**  
Third round stakeholder meetings: present final concept







# QUESTIONS?



Port Authority